

DISPLAYS

FAQ

Q How does a dynamic contrast ratio mode on a monitor work?

A LCDs typically have low contrast ratios compared to plasmas and CRTs, so they struggle to display scenes with very dark colours and very light colours. However, most images don't have a high contrast, so an LCD can be adjusted dynamically to display the best picture based on the input.

Dynamic contrast ratios work by monitoring the grey level and adjusting the backlight accordingly. Dark scenes cause the backlight power to be lowered, creating darker shades; light scenes cause the backlight power to be raised, creating lighter shades.

For traditional LCDs with a cold cathode fluorescent lamp (CCFL) backlight, the changes are made to the entire panel; for newer LCDs with light-emitting diode (LED) backlights, individual portions of the screen can be adjusted independently, making for more effective contrast control.

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LG Flatron L1900J

★★★★

£211 inc VAT

Even the best monitors are rarely very exciting to look at, so it's good to see LG has made a bit of an effort with its Fantasy series.

The 19in Flatron L1900J is the first in the series that we've seen and it's certainly eye-catching. It has a gorgeous glossy black case and a thin 18mm bezel. The gently curved stand looks great, too, with the inner surface finished in cherry-red. This colour is given a deeper hue when the power indicator light, positioned under the monitor, is on. You can choose four brightness levels for this light to match the mood of the room it is in. If you don't like the look of the stand, the L1900E Eclipse is the same panel with a U-shaped stand, while the L1900R Ring has a doughnut-shaped stand. These models only let you turn the power indicator light on and off, though.

There are no control buttons to spoil the smooth, moulded curves of the display's case. All image adjustments are done through LG's Forte Manager software instead. It's simple to use and has a calibration utility to help you configure the monitor's brightness, contrast and colour settings. We have our misgivings about software-only controls, though. It means you'll be unable to adjust settings if Forte Manager doesn't work on your PC or if you plug in another device such as an Xbox 360.

The power and DVI connectors are housed in a separate box attached to the rear of the stand. This prevents unsightly cables spoiling the sleek lines of the display. However, the L1900J has an external power adaptor, which will take up valuable desk space.

The L1900J has a 2,000:1 dynamic contrast ratio when the movie mode



is turned on. This dynamically adjusts the image settings based on the input to give this high figure, although it's not as good as a true 2,000:1 contrast ratio (see FAQ, left). Still, it worked well for movies, producing rich and vibrant colours and clear details in the darkest areas of an image. It's a shame LG hasn't put this technology into a widescreen monitor.

In standard mode, the monitor has a more average 700:1 contrast ratio, which is the same as Iiyama's X486S-B1 in 'Also Consider...' below. We found that Iiyama's monitor produced the better picture, though, with a sharper image and better colour reproduction. It left the L1900J looking distinctly average.

If looks are important to you, LG's Flatron L1900J will impress; it's the most attractive-looking monitor we've reviewed. The movie mode is useful, but would have been better in a widescreen display, while standard image quality was average. Iiyama's X486S-B1 may not be quite as eye-catching, but it has a far better picture and costs £25 less.

Lynley Oram

SUMMARY

- ✓ Attractive design
- ✓ High contrast ratio for movies
- ✗ Uneven screen illumination

19in LCD 1,280x1,024 resolution, 700:1 contrast ratio, 4ms response time (grey to grey), DVI
PART CODE L1900J
SUPPLIER <http://uk.insight.com>
DETAILS www.lge.com

Also consider...

SAMSUNG 215TW

★★★★★

£363 inc VAT

Samsung's 215TW is a top-quality monitor that's perfectly suited to home and work use. Viewing angles are excellent and the picture quality cannot be faulted. It has a comprehensive range of connections, including S-video, composite, component, DVI and D-sub. There's a picture-in-picture option, too, so you can watch DVDs while you work.

21in LCD 1,680x1,050 resolution, 1,000:1 contrast ratio, 8ms response time, D-sub, DVI, S-video, composite and component inputs
PART CODE SAMQDPWASQ
SUPPLIER www.pixmania.com
DETAILS www.samsung.co.uk
✓ Excellent picture quality ✗ Pricy
FULL REVIEW Sep 2006



IYYAMA X486S-B1

★★★★★

£186 inc VAT

Iiyama's X486S-B1 is a tastefully designed display. It has a reflective coating, which makes colours look richer and blacks look darker. An ambient light sensor automatically adjusts the monitor's brightness according to the room's light level, while an infrared sensor detects when you're in front of the monitor and turns it off to save power when you're not.

19in LCD 1,280x1,024 resolution, 700:1 contrast ratio, 2ms response time, D-sub, DVI, USB2 port PART CODE X486SB1
SUPPLIER www.morecomputers.co.uk
DETAILS www.iiyama.co.uk
✓ Good picture quality
✗ Auto-brightness feature doesn't work very well FULL REVIEW Feb 2007



AG NEOVO K-A19

★★★★★

£128 inc VAT

If you're building a system on a budget, AG Neovo's 19in widescreen K-A19 monitor is ideal. It isn't the best-looking monitor we've seen, but it has excellent image quality. The display is sharply focused with rich and vibrant colours.

The lack of a digital input is disappointing, but otherwise this is an excellent display at a great price.

19in WIDESCREEN LCD 1,440x900 resolution, 850:1 contrast ratio, 3ms response time (grey-to-grey), D-sub PART CODE K-A19
SUPPLIER www.lambda-tek.com
DETAILS www.ag-neovo.co.uk ✓ Good image quality; inexpensive ✗ Unattractive design FULL REVIEW May 2007



MIRAI DTL-522P201

★
£278 inc VAT

If you're looking to get an HD TV but don't have £500 to buy a large TV set, Mirai's 22in DTL-522P201 will be of interest. At just £278 including VAT it's the cheapest HD TV we've seen.

The DTL-522P201 doesn't look like a budget model, as its neat black and silver design compares favourably with TVs from the big brands. Beneath the surface, however, the price starts making sense. For starters, there's no Freeview tuner. Although the analogue tuner does a decent job of receiving a clear picture, it's not as useful as being able to get digital TV. You'll need to buy a separate set-top box for Freeview.

The DTL-522P201's high native resolution of 1,680x1,050 sounds impressive, but it's actually a bit strange in the way it works. First, Mirai recommends that PCs are set to a maximum resolution of 1,280x720 when connected using DVI through the HDMI port. This means the monitor has to upscale the picture to match the native resolution, which results in a loss of image quality. Using the VGA input, the monitor supports a maximum resolution of 1,440x900, so the image still has to be upsampled to fill the screen. We couldn't get a good picture using VGA or HDMI with our PC, and the screen always looked blurry.

Viewing HD movies was a similarly disappointing experience, and the TV does a poor job of scaling 720p and 1,080i videos. HD footage didn't look as sharp or as detailed as it should, while colours lacked vibrancy and weren't natural. Much TV output is in standard definition, so we also



tested the display using a DVD movie. No matter how we adjusted the settings, images lacked sharpness, large blocks of colour such as the sky appeared extremely speckled, and aliasing was clearly visible on straight edges. This is not a TV we'd recommend for watching DVDs.

The sound quality is just as bad. The speakers lack bass and are painful on the ears at high volumes. There are also fewer ports on this TV than we're used to seeing. There's no S-video, and component video is available only through the VGA input using an adaptor. This could be irritating if you plan on using a PC and want to connect a DVD player or games console.

The DTL-522P201 is not good value. ViewSonic's 20in N2060w (reviewed in *What's New, Shopper* April 2007), which costs just £300, is a far better television. If you want a bigger screen, Samsung's LE26R74BD might cost £180 more, but we'd recommend paying that little bit extra rather than buying this TV.

Lynley Oram

SUMMARY

- ✓ Inexpensive
- ✗ Disappointing image quality
- ✗ Poor sound quality

22in LCD HD TV 1,680x1,050 resolution, 700:1 contrast ratio, 5ms grey-to-grey response time, D-sub, HDMI, 2x SCART
PART CODE DTL-522P201
SUPPLIER www.mirai.eu
DETAILS www.mirai.eu

CHOOSING A... Projector

Follow the steps to find your ideal specs

NATIVE RESOLUTION: 1,024x768
BRIGHTNESS: 1,000 ANSI lumens
CONTRAST RATIO: 500:1
LAMP LIFE: 2,000 hours
CHECK: Weight, throw distance, noise
Recommended minimum in grey

1 Low-cost projectors make two main sacrifices. The brightness, measured in ANSI lumens, will be relatively low and the native resolution will be limited to 1,024x768. Neither need be serious drawbacks if you want to use your projector for presentations or DVDs.

If you want to be ready for High Definition video, though, you'll need a projector with a resolution of at least 1,280x720 and either an HDMI port or HDCP-compliant DVI port.

2 Image quality is obviously important, but this is hard to assess from specifications alone. A high contrast ratio (over 500:1) adds depth to the picture and is one tangible benefit of projectors based on digital light processing (DLP) rather than the older LCD technology. The quality of the optics and colour balance cannot be gauged without consulting a review, though.

3 Consider where you'll be using your projector; size and weight are important if the unit will be moved around a lot. You should aim for under 3kg if portability is an issue. Small rooms demand a quiet (sub-33dB) projector and a flexible throw distance; this tells you how close or far away the screen can be. Most projectors can mirror or rotate their image to cope with ceiling mounting or rear projection.

4 Check that the projector can cope with all the signals you might want to feed it. Common video formats are supported by almost all projectors, but high-resolution VGA signals and HDMI aren't. Highly detailed slides will display at their best only on pricier projectors with a 1,280x1,024 native resolution.

5 The brightness of the projector will depend on where you need to use it. Projectors with 1,000 ANSI lumens are fine for darkened rooms, but for meeting rooms you should get a minimum of 1,300 ANSI lumens. Remember brighter projectors will cost more to run as their bulbs need replacing more often. An ECO mode reduces the brightness of the projector but increases bulb life.

DELL 1800MP

★★★★★
£704 inc VAT

BEST BUY Dell's 1800MP is a good all-round projector. It is reasonably priced and has excellent image quality. Two D-sub VGA connectors allow it to be connected to two computers at once, so you can swap between two presenters.

If you want a business projector this is the best choice, and it's also suitable for watching movies from time to time.



OFFICE PROJECTOR DLP 1,024x768 native resolution, 2,000:1 contrast ratio, 2,100 ANSI lumens PART CODE 1800MP SUPPLIER Dell 08701 524699 DETAILS www.dell.co.uk ✓ Good contrast; superb image quality; minimal rainbow effect FULL REVIEW May 2007

LG 32LC2D

★★★★★
£550 inc VAT

LG's 32LC2D produces beautiful, realistic pictures. Images from our HD movie clips were perfect and the TV displayed every detail flawlessly. Connecting to a PC is easy through D-sub or HDMI and the picture was brilliant. It's excellent value, with a wide range of connections.



32in LCD HD TV VGA, HDMI, component, three SCART, optical S/PDIF, digital tuner PART CODE 32LC2D SUPPLIER www.empiredirect.co.uk DETAILS http://uk.lge.com ✓ Superb all-round picture quality; good computer display FULL REVIEW Nov 2006

HITACHI Illumina PJ-TX300

★★★★★
£793 inc VAT



BEST BUY The glossy sheen on Hitachi's Illumina PJ-TX300 looks fabulous, but this projector is more than just a pretty face. The PJ-TX300 will show a high-quality 203cm image at two metres.

If you want a projector to show films this is an ideal choice, and it's a bargain, too.

HOME CINEMA PROJECTOR 3-LCD, 1,280x720 native resolution, 10,000:1 contrast ratio, 1,200 ANSI lumens PART CODE HITPRX63 SUPPLIER www.pixmania.co.uk DETAILS www.hitachidigitalmedia.com ✓ Inexpensive; Superb image quality; excellent contrast FULL REVIEW May 2007